

# the report

A woman with long dark hair, wearing a dark sleeveless top and a dark skirt, is smiling and speaking into a microphone. She is standing in front of a large blue banner. The banner features the 'inGenious' logo at the top, followed by the text 'Shaping the future of maths and science education' and the website 'ingenious-science.eu'. Below this, there are several icons and labels: 'Industry', 'Schools', 'Education', and 'Business'. The background is a light blue wall with a grid pattern. The entire image has a blue tint.

**Águeda Gras-Velázquez** is the Science Programme Manager of European Schoolnet (EUN). As Head of the Science Education Department at EUN, she oversees all STEM projects in which EUN is involved. Additionally, she is in charge of the day-to-day management of *Scientix* (the community for science education in Europe) and coordinates EUN's Ministries of Education STEM representatives Working Group. In her 12 years at EUN, Águeda has been involved in more than 60 EC funded projects and 18 private funded ones. Before joining EUN in May 2008, she worked as an independent eLearning Professional as Tutor, Content designer, IT manager, Administrator, Project Manager and Consultant for international projects. She has co-authored several papers in Science Education Research and has a PhD in Astrophysics from Trinity College Dublin, carried out at the Dublin Institute for Advanced Studies in Ireland.

# Scientix

## The community for science education in Europe

by Maria Font

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### INTERVIEW WITH ÀGUEDA GRAS-VELÁZQUEZ

**W**hat is Scientix?  
As the community for science education in Europe, Scientix aims to promote and support the collaboration between teachers, education researchers, policymakers, and other education professionals in STEM across Europe. Since 2010 Scientix has developed in such a way that today it provides European teachers with a platform to expand their own knowledge of STEM subjects by connecting with other fellow teachers and getting inspired by all types of STEM education projects. This precious exchange takes place directly on the Scientix platform, where teachers can find new ideas for their classes through the resources' repository and online training, webinars, and community practices the projects offer. As part of its core mission, Scientix also functions as a bridge that connects European teachers to other professionals in STEM fields by creating the space for them to co-organise events and present the projects they are carrying out with their classrooms at Scientix conferences. Finally, Scientix allows policymakers to stay up to date with the most recent theoretical and practical developments of different STEM subjects, influencing future national strategies that might be adopted in science education.

#### How did Scientix start, and how did it evolve?

Scientix was born in 2010 thanks to the European Commission's General Directorate for Research and

Innovation that wanted to ensure that all materials and results from public-funded projects did not disappear once the projects finished. It has developed in three phases. Between 2010 and 2012, the project created a space where European STEM projects could be presented by developing an online portal and organising several workshops for teachers. Between 2013 and 2015, Scientix contributed to developing national strategies promoting innovative approaches to science and math education through the creation of a network of National Contact Points (NCPs). Finally, between 2016 and 2019, Scientix expanded its panel of Scientix Ambassadors and professional development opportunities. Scientix is an initiative of the European Commission (EC); since its inception, it has always been proudly coordinated by European Schoolnet (EUN), and it is everybody involved in Scientix and STEM education that makes it the success it has become.

#### Scientix 10 years later

During the last ten years, I could experience the value Scientix brought to STEM education across European schools. Besides the positive feedback we have received from many teachers who attended workshops offered by Scientix, this community has proven itself to be an incredible tool for professional networking and knowledge sharing. When speaking about these achievements, my reference extends beyond those actions EUN organises

## ***Scientix allows policymakers to stay up to date influencing future national strategies that might be adopted in science education.***

and is primarily responsible for (e.g., Scientix national conferences, publications, reporting, etc.). The potential of Scientix became firstly tangible to me when witnessing how European teachers used the community to snowball into similar projects, not because EUN asked them, but out of their own will. For me, it is in these teachers' desire to connect and share their experiences with other professionals for the sake of expanding the body of knowledge surrounding STEM where the success of Scientix lies. In this sense, Scientix is a catalyser – it does not speak about itself, but rather about the effort, achievements, and struggles of many teachers who, thanks to the community, actively contribute to feeding the flow and exchange of STEM knowledge.

### **A specific case of success of Scientix**

One of the main achievements of Scientix is connecting all these teachers Physics, Chemistry, Primary education, Mathematics, Biology, Engineering, and even non-STEM subjects. Thus, creating a real *STEM* community that ensures no teacher feels alone in front of the problems of teaching.

In 2010 when we started Scientix, it took us time to find 30 teachers willing to dedicate time to sharing their expertise in STEM education with everybody else. Accept that whatever they created would be freely available for all. Since then, we have moved to a Scientix Ambassadors teachers' panel with 90 ambassadors in 2014 to 400 in 2018 and to 850 in 2021, with many more just missing out on the cut due to the different requirements to take this role. These teachers have become beacons of ideas, support and collaboration.

In these years, we see teachers across Europe going out of their way to organise different workshops under the Scientix umbrella on topics from remote labs to the Flipped Classroom concept, Robotics, practical

experiments or Nature-Based solutions. They organise short workshops, long ones, online, face-to-face. Whatever format you need, Scientix Ambassadors find a way. It is not about *why cannot it be done for them* but *how can we make it happen*.

I have seen teachers from different countries sit together and come up with a project over dinner. I have observed how teachers who met at the beginning of Scientix and struggled to communicate in English write together several European Commission projects three years later, which they got funded. I have received emails from many, many many teachers which after meeting other STEM teachers from across Europe, are now collaborating, exchanging, meeting...

In 2019 the European Commission called for an award to the best Horizon 2020 funded projects. We decided to submit Scientix for consideration at the time. One of the requirements was to provide a couple of support letters showing the achievements. It was a Friday, and I wrote to the Scientix Ambassadors to get 2 or 3 of these letters. I spent the weekend collecting over 170 letters from teachers across Europe and beyond sharing their experiences and how Scientix had helped them develop, different actions taken at school, local or regional level to improve STEM education, networks created, new projects and activities. Scientix did not win the formal award, but we achieved more than we ever imagined. The Scientix Community for science education in Europe was alive beyond anything we had planned. Scientix is there to provide a community for all and to get the knowledge flowing; to get the information travelling (what you do not find in your country/project/class, you can find abroad/elsewhere); to ensure that no project works by itself; that no STEM centre or organisation needs to start from scratch and no teacher faces alone the arduous but most needed task of getting kids to know, like and even dream about science.

## ***This community has proven itself to be an incredible tool for professional networking and knowledge sharing.***



